

## **ABSTRACT OF THE DISCLOSURE**

[0026] The invention composes a method and instrumentation for ultrasound stimulation of the hybridization reaction in gene expression microarray test chambers (or hybridization stations). The microarray or gene chip with the DNA molecules solution added on the surface, is mounted in a system that allows transmission of ultrasound waves into the DNA solution. The ultrasound may also be used for the washing procedure after the hybridization process